

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

HEADWATER RESEARCH LLC,

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD and
SAMSUNG ELECTRONICS AMERICA, INC.,

Defendants.

Case No. 2:23-CV-00103-JRG-RSP

**SAMSUNG'S *DAUBERT* MOTION AND
MOTION TO STRIKE EXPERT REPORT OF DR. ANDREAS GROEHN**



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EXHIBIT INDEX AND NOTES

Exhibit	Description
A	Report of Dr. Andreas Groehn, dated September 26, 2024
B	Excerpts from the Deposition of Dr. Andreas Groehn, taken May 13, 2024
C	Excerpts from the Rough Deposition of Dr. Andreas Groehn, taken Oct. 18, 2024
D	Allenby 2019

* Emphasis added unless otherwise noted.

** Form objections are omitted from deposition transcript quotations unless otherwise noted.

*** In this brief, “Headwater” refers to Plaintiff and its purported predecessors.

[REDACTED]

Dr. Groehn’s opinions lack any factual basis from this case. Instead of conducting an independent analysis, he repurposed a study he performed for a different case involving entirely different patents and technology. Indeed, he was hired by Headwater’s lawyers to parrot the same conjoint survey from the *HWI* case. By his own admission, for this case, Dr. Groehn:

- never reviewed the asserted patents,
- never reviewed the accused features,
- never consulted the technical expert to understand what feature(s) to test,
- never reviewed a single Samsung-produced document in this case, and
- never read any Samsung witness deposition in this case.

Ex. C (Groehn 10/18/2024 Rough Tr.) at 26:16–27:05, 27:06–09, 27:16–19, 27:24–28:03, 29:08–10, 32:21–24, 32:25–33:03, 35:01–03, 37:05–08. Dr. Groehn simply cannot provide testimony that is “based on sufficient facts or data” or “reflects a reliable application of the principles and methods to the facts of the case—as required by Federal Rule of Evidence 702—when he concedes that he never engaged with the facts of **this** case to begin with. Dr. Groehn may have expertise, but he is not an independent expert who can offer probative opinions here.

More fundamentally, Dr. Groehn’s methodology fails to pass muster under *Daubert*, as he misapplied a well-established statistical method. Conjoint analysis has a time and place: it is useful for assessing consumers’ **relative** preferences, such as comparing their preference for screen size versus camera quality. However, Dr. Groehn goes too far, by improperly attempting to use conjoint analysis to produce **absolute** results—specifically, to determine exact price points consumers would pay for incremental increases in “battery life”—an undefined and subjective feature. The literature is clear that this is a misuse of conjoint analysis, and Headwater cannot point to any non-litigation example where it has been used this way. Dr. Groehn’s approach

[REDACTED]

distorts the methodology, risking confusion for the jury by presenting it as an accepted practice. Given the complexity of the analysis, cross-examination is insufficient to educate the jury on the bounds of conjoint analysis, and the Court must intervene to prevent misleading and unreliable evidence from being introduced at trial.

I. FACTUAL BACKGROUND

A. Dr. Groehn's Study Is Performed for a Different Litigation

The opinions and conclusions presented in Dr. Groehn's report were not developed for this case. Dr. Groehn's report is a near-carbon copy of the report he issued in *Headwater Research LLC v. Samsung Elecs. Am., Inc.*, Case No. 2:22-cv-00422 (E.D. Tex.) (hereinafter "*HWI*"). Critically, the underlying "pilot" survey and "conjoint" survey were conducted for *HWI* and the results were merely reused in this case. But while the parties in that prior litigation are the same, the patents and technology are not.

In the prior case, Headwater accused several power-savings technologies, such as "Power Saving Mode" and "Doze Mode." See *HWI* Dkt. 266, at 14. In that case, Dr. Groehn was asked by Headwater's lawyers to "measure the economic value of increased battery life in mobile phones designed and manufactured by [Samsung]." Ex. B (Groehn 5/13/2024 Tr.) at 113:07–14 ("When I was retained by Headwater through counsel to measure the economic value of battery life or improvement in battery life. I had no reason -- no other reason to investigate the economic value of battery life.").

Here, however, the accused technology is not focused solely on power savings; it is a specific method of performing push notifications. But instead of instructing Dr. Groehn to conduct a new survey on how consumers value the accused push notifications systems, Headwater's lawyers directed Dr. Groehn to simply reuse the survey from *HWI*. Ex. C (Groehn 10/18/2024 Rough Tr.) 47:12–18 ("A: In Headwater versus Samsung 2 we relied on the same pilot survey and

then conjoint analysis as in Headwater versus Samsung 1.”). In fact, his report does not acknowledge the technology in this case **at all**—instead noting that the sole assignment was to “assess the economic value of increased battery life.” Ex. A (Groehn Rpt.) ¶ 14.

B. Dr. Groehn’s Recycled Conjoint Survey

The methodology Dr. Groehn used from the prior litigation involved conducting a conjoint survey to evaluate the price consumers would pay for a 5% or 10% improvement over “standard” battery life. Ex. A (Groehn Rpt.) at ¶¶ 9, 146, 155. Conjoint surveys are designed to measure trade-offs and relative demand for various product features. Ex. A (Groehn Rpt.) at ¶ 88 (“Respondents repeatedly make a **trade-off between products with varying attributes**. By analyzing these responses, researchers can establish a demand curve for specific products and determine the **shift in demand when levels of attributes are changed**.”). Dr. Groehn’s survey asked respondents to choose between two product options, as shown below.

Figure 23– Conjoint Survey Screenshot: Conjoint Screen Example

Question 1 of 15.

(If you want to see the information you just reviewed again, you can click or tap on the feature which is displayed on the left side of the screen, and a pop-up box will provide the information.)

	Option 1	Option 2
Model	Samsung Galaxy S24	Apple iPhone 15
Water Resistance	IP 68	IP 68
Storage Capacity	512 GB	128 GB
Battery Life	10% more	Standard
Screen Size	6.8 inches	6.7 inches
Camera Performance	Yes: Low Light Camera included	No: Low Light Camera not included
Price	\$1119	\$599
Which smartphone do you prefer?	SELECT	SELECT

SHOWN FOR TESTING -- Version: 14 of 252, Trial: 1 of 15

Would you actually purchase the option you selected above?

Yes No

Ex. A (Groehn Rpt.) at Fig. 23.

[REDACTED]

Respondents repeated this choice fifteen times, with each prompt randomizing the seven attributes: model, water resistance, storage capacity, battery life, screen size, camera performance, and price. The stated purpose of Dr. Groehn’s analysis was to “quantify the economic value of battery life,” which he identified as the “Feature of Interest.” Ex. A (Groehn Rpt.) ¶ 15. He referred to the remaining features as “decoy” attributes. Ex. A (Groehn Rpt.) ¶ 67. For each decoy feature, Dr. Groehn presented respondents with multiple real-world, objective options:

Decoy Feature	Options
Model	Galaxy S24, Edge (2023), or iPhone 15
Storage	128 GB, 256 GB, or 512 GB
Camera	low light camera included or not included
Water Resistance	IP66 or IP68 compliant
Screen Size	6.1” or 6.7”

Following this pattern, one would expect Dr. Groehn to present objective, quantifiable battery life options for his “feature of interest,” such as 8 hours, 16 hours, or 24 hours. Instead, Dr. Groehn presented **subjective** options with no point of reference: “Standard battery life,” “Battery life increased by 5% under normal usage,” and “Battery life increased by 10% under normal usage.” Ex. A (Groehn Rpt.) at Figure 17. Critically, Dr. Groehn neither defined the term “standard battery life” for survey respondents nor asked them what their understanding of the term was, which, by Dr. Groehn’s own admission, is different to every user. Ex. B (Groehn 5/13/2024 Tr.) at 177:18–179:04; Ex. C (Groehn 10/18/2024 Rough Tr.) at 90:02–16.

C. Dr. Groehn’s Conjoint Analysis

Dr. Groehn used the results of his recycled survey to conduct a conjoint analysis (here, by calculating part-worths, running a regression, and generating demand curves) to allegedly illustrate the “incremental profit”¹ Samsung could receive for improvements in battery life of 5% to 10%

¹ Dr. Groehn admits he assumed an “incremental cost” of zero. Ex. B (Groehn 5/13/2024 Tr.) at 129:05–13.

[REDACTED]

above “standard battery life.” Ex. A (Groehn Rpt.) at ¶¶ 127–146. This is precisely what Dr. Groehn’s cited literature cautions that conjoint analysis cannot be used for. Ex. D (Allenby 2019) at -81 (“[i]t should be emphasized that conjoint analysis can only estimate demand. **Conjoint survey data, alone, cannot be used to compute** market equilibrium outcomes such as **market prices...**”). In fact, Dr. Groehn acknowledges in his report: (1) battery life is “clearly interdependent” with other features like battery capacity (which was not included in his study), Ex. A (Groehn Rpt.) ¶ 151; and (2) one Samsung internal conjoint analysis showed a dramatically smaller “lift” in battery life when expressly tested in 8-hour increments (i.e., battery lives of 8 hours, 16 hours, 24 hours, etc.) than his results testing for a much smaller amount of increase in battery time. (*id.* ¶¶ 150–51). He also admits that, unlike his use of conjoint analysis, Samsung uses conjoint analyses only to understand consumer preferences for features, and not to set prices of individual features. Ex. B (Groehn 5/13/2024 Tr.) at 139:04–140:06. In the face of these admissions, he purports to have still “carefully analyzed” the prices of the phones and then concluded that Samsung earned an “incremental profit” per phone of [REDACTED] based on battery life. Ex. A (Groehn Rpt.) at ¶ 80, Table 7.

II. LEGAL STANDARD

Under Federal Rule of Evidence Rule 702, an expert may offer opinion testimony if “the testimony is based on sufficient facts or data,” “the testimony is the product of reliable principles and methods,” and “the expert's opinion reflects a reliable application of the principles and methods to the facts of the case.” Fed. R. Evid. 702. The Rule “assign[s] to the trial judge the task of ensuring that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand.” *Daubert v. Merrell Dow Pharms. Inc.*, 509 U.S. 579, 594, 597 (1993). As part of that analysis, courts consider whether the “technique is ‘generally accepted’ as reliable in the

relevant scientific community.” *Id.* at 584, 593–94; *see also Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 145 (1999).

Federal Rule of Evidence 702 was recently modified to confirm that the proponent of the testimony bears the burden of establishing the testimony “is more likely than not . . . the product of reliable principles and methods.” Fed. Rule of Evid. 702 & subd. (b)–(c). The Advisory Committee Notes distinguish the prior rule noting, “many courts have held that the critical questions of the sufficiency of an expert’s basis, and the application of the expert’s methodology, are questions of weight and not admissibility. These rulings are an incorrect application of Rules 702 and 104(a).”

III. ARGUMENT

A. Dr. Groehn’s Survey Is Divorced from the Facts of the Case

Federal Rule of Evidence 702 requires that “the expert’s opinion reflects a reliable application of the principles and methods **to the facts of the case.**” Yet Dr. Groehn has made no attempt to tailor or tie his study from *HWI* to the facts of this case, which is undisputedly about different technology. First, Headwater’s lawyers—not Headwater experts in this case—merely reused Dr. Groehn’s prior assignment “to measure the economic value of increased battery life in mobile phones”:

Q: Who told you to analyze battery life in this case?

A: I believe *counsel* explained to me that battery life was the attribute of interest in this matter.

...

Q: Other than Headwater’s lawyers, did you have any other independent reason to study battery life for this case?

A: I don’t think so.

Ex. A (Groehn Rpt.) ¶ 9; Ex. C (Groehn 10/18/2024 Rough Tr.) 26:16–27:05. Indeed, Dr. Groehn could only vaguely recall that the features at issue are push notifications, and could not describe anything further than that, including how push notifications purportedly relate to battery life. Ex. C (Groehn 10/18/2024 Rough Tr.) at 27:24–28:03 (“Q: Do you know what the accused features of the Samsung products are in this case? A: I learned it’s something about push notifications but that is all I know.”). And Dr. Groehn did not consider any facts specific to this case:

- Dr. Groehn was not provided the patents from this case (*id.*, *see also* Ex. C (Groehn 10/18/2024 Rough Tr.) at 29:08–10 (“Q: You didn’t review the asserted patents in this case then. Correct? A: I did not review the patents.”))
- Dr. Groehn could not confirm whether the patents in this litigation were different from *HW1*. Ex. C (Groehn 10/18/2024 Rough Tr.) at 27:06–09 (“Q: Are you aware that the patents asserted in Headwater 1 and Headwater 2 are different patents? A: That’s possible.”).
- Dr. Groehn did not know that the accused products in this case are different from those accused in *HW1*. Ex. C (Groehn 10/18/2024 Rough Tr.) at 27:16–19 (“Q: Are you aware that the accused products in Headwater 1 and Headwater 2 are different? A: I don’t think I’m aware of that.”).²
- Dr. Groehn was not provided **a single document** unique to this case. Ex. A (Groehn Rpt.) at 66 (Materials Considered List); *see also* Ex. C (Groehn 10/18/2024 Rough Tr.) at 32:21–24 (“Q: Do you know if you were given access to all of the documents produced in Headwater 2? A: I do not know.”).

² Additionally, while Dr. Groehn’s survey studied only consumers’ preferences with respect to smartphones, Mr. Dell’s analysis improperly extrapolates—without any basis—those results to tablets and watches, neither of which were the subject of Dr. Groehn’s analysis.

- Dr. Groehn was not provided any deposition transcripts from this litigation. Ex. A (Groehn Rpt.) at 66 (Materials Considered List); *see also* Ex. C (Groehn 10/18/2024 Rough Tr.) at 32:25–33:3 (“Q: Do you know if you were given access to all of the deposition transcripts in Headwater 2? A: I do not know.”).

Indeed, Dr. Groehn conceded he **never** spoke to Headwater’s technical expert or reviewed the opinions set forth in his report. Ex. C (Groehn 10/18/2024 Rough Tr.) at 31:21–24 (“Q: Besides Mr. Dell, did you speak with Dr. De La Iglesia [Headwater’s technical expert] in this case? A: That name does not sound familiar to me.”). Finally, Dr. Groehn did not verify his inputs or results with any Headwater expert. Ex. C (Groehn 10/18/2024 Rough Tr.) at 37:05–08.

Acting in their role as gatekeeper, courts regularly exclude conjoint surveys when the disparity between the patented features and the subject of the survey is so substantial such that the survey no longer relates to the facts of the case and thus is not helpful to the jury. *See Unwired Planet, LLC v. Apple Inc.*, No. 14-cv-04134-VC, 2017 WL 589195, at *1 (N.D. Cal. Feb. 14, 2017) (excluding conjoint survey results and all damages analysis derived therefrom because survey’s feature descriptions were so different from the patented features that survey was effectively “targeted at an invention other than the one at issue in this litigation”); *Fractus, S.A. v. Samsung, et al.*, No. 09-cv-203-LED, 2011 WL 7563820, at *1 (E.D. TX Apr. 29, 2011) (same); *cf. Apple, Inc. v. Samsung Elecs. Co.*, No. 12-CV-00630-LHK, 2014 WL 794328, at *18 (N.D. Cal Feb. 25, 2014) (noting that, where a survey’s description of patented features “may vary so much from what is claimed that the survey no longer relates to any issue in the case and is not relevant and, ergo, non-helpful [to the trier of fact],” the survey “must be excluded under Rule 702(a).”). “One of the worst abuses in civil litigation is the attempted spoon-feeding of client-prepared and lawyer-orchestrated ‘facts’ to a hired expert who then ‘relies’ on the information to express an opinion.”

Therasense, Inc. v. Becton, Dickinson & Co., 2008 WL 2323856, at *1 (N.D. Cal. May 22, 2008).

Because there is no evidence that Dr. Groehn even attempted to connect his work to the facts and evidence of this case, his repurposed, untailored, and generic analysis from a prior litigation should be excluded.

B. Dr. Groehn's Repurposed Survey Is Unreliable Because "Standard" Battery Life Has No Objective Meaning

Even assuming that Dr. Groehn had demonstrated that surveying respondents about battery life was an appropriate method of valuing the benefit provided by the asserted patents (he has not), Dr. Groehn did not test "battery life" using any quantifiable, objective metric, instead presenting that "Feature of Interest" as a subjective "standard battery life," which makes his entire opinion unreliable. Specifically, Dr. Groehn's survey asked people to choose between "standard battery life," "battery life increased by 5% under normal usage," and "battery life increased by 10% under normal usage." Without clear, objective definitions of either his feature of interest ("battery life") or of the levels tested ("standard," "5% more", "10% more"), the survey fails to meet the basic best practices required and regularly used by survey practitioners in the field. The failure to clearly and objectively define his terms causes his survey to yield useless results: the value of a supposed boost of 5% or 10% in battery life dramatically varies depending on the subjective "standard" baseline chosen for each survey taker and the ability of each respondent to accurately calculate a specific understanding of 5% or 10% more than their random baseline.

1. Dr. Groehn's Survey Did Not Define "Standard" Battery Life, Leaving Each Survey Respondent to Attribute Their Own, Subjective Meaning

Dr. Groehn's survey presented respondents with three choices for the "battery life" feature of interest: "standard battery life," "battery life increased by 5% under normal usage," or "battery life increased by 10% under normal usage." Ex. A (Groehn Rpt.) ¶ 76. Dr. Groehn did not tell survey takers how to measure "standard" battery life, even though "standard" has no commonly

accepted meaning. Dr. Groehn admitted there would be a different perception of “standard” for each survey taker. Ex. B (Groehn 5/13/2024 Tr.) at 172:04–173:10.

As Dr. Groehn concedes, battery life varies considerably between individuals based on use of the phone, screen size, features used, etc. Ex. B (Groehn 5/13/2024 Tr.) at 41:09–25 (e.g., explaining capacity of the battery, efficiency, software, screen size, all have potential impact on battery life). But his survey did not instruct participants on any number of hours, or minutes, or days, of battery life that should be considered “standard.” *Id.* at 175:22–176:16. Thus, the survey provides the participants with no way of understanding if “standard battery life” would be suitable for their purposes or if they might need or want something more. Instead, Dr. Groehn admits that every individual survey taker may have had his or her own, different understanding of the battery life that is “standard.” *Id.* at 172:20–173:01 (“[T]he standard . . . battery life [is what] a respondent would expect.”).

Juxtaposing how Dr. Groehn described “battery life” against other attributes further underscores the survey’s unreliability. For other features, Dr. Groehn provided precise, objective options that survey takers frequently encounter in the real marketplace: Brand/Model (Apple iPhone 15, Samsung Galaxy S24, Motorola Edge), Storage Capacity (128 GB, 256 GB, 512 GB), Low Light Camera (Yes, No), Water Resistance (IP 66, IP 68), and Screen Size (6.1 inches, 6.2 inches, 6.6 inches, 6.7 inches, 6.8 inches (coinciding with brand/model)), and prices. But for battery life, Dr. Groehn took a markedly different approach, offering instead the subjective “standard” battery life as a baseline, and a “5% more” or “10% more” multiplier. In the real marketplace, smartphone buyers usually encounter information about battery life in the length of time on a single charge (not in percentage increases), which Dr. Groehn appears to understand. Ex. B (Groehn 5/13/2024 Tr.) at 116:11–117:05, 120:03–16; Ex. A (Groehn Rpt.) at Fig. 17.

Samsung, for example, advertises battery in terms of hours or days—both of which are objective, quantifiable metrics. Ex. B (Groehn 5/13/2024 Tr.) at 120:03–16.

Dr. Groehn’s relative measurement of battery life in his survey leads to inconsistent results among respondents. For example, one respondent who understood “standard” battery life to be 10 hours would interpret a 5% increase as 30 minutes of additional battery and a 10% increase as an hour of battery. However, another respondent who understood “standard” battery life to be only 3 hours would interpret the same incremental increases as only 9 minutes and 18 minutes. The survey’s reliance on the respondents’ perception of “standard” battery life thus leads to illogical assignments of the same “incremental value” for different levels of additional battery.

Yet, Dr. Groehn chose to **not** present the levels of battery life in terms of hours. The failure to properly define the terms of a survey, particularly the feature of interest, is well established to be a fundamental flaw in survey methodology. Here, the vague, subjective framing of battery life levels, which leaves the definition up to each individual survey respondent, then renders the untethered survey results meaningless and unable to be used to determine quantifiable “profit” or “price.” Accordingly, Dr. Groehn’s opinions here are unreliable as based on an unreliable survey method which produced unreliable results, particularly considering that Dr. Groehn ignored real-world, available advertised battery life information (in number of days and hours) for the phones he tested. Ex. B (Groehn 5/13/2024 Tr.) at 177:02–16.

2. The Supposed Incremental Value of “5%” Or “10%” Increase Is Equally Vague, Rendering the Results Unreliable

The practical implication of Dr. Groehn’s failure to define a “standard” battery life is to confirm the unreliability of his methods. Dr. Groehn alleges that the difference between a 5% increase in battery life versus a 10% increase is not linear, and would instead vary wildly depending on the “standard” battery life. Ex. B (Groehn 5/13/2024 Tr.) at 172:04–176:08.

According to Dr. Groehn, if a smartphone has a 5% increase in battery life above “standard” battery life—which as noted above could range from minutes to hours—Samsung makes at least [REDACTED] in incremental profit. Ex. A (Groehn Rpt.) ¶ 146, Fig. 32, Table 7. If Samsung provides a 10% increase above “standard” battery life, then Samsung’s incremental profit supposedly jumps up to at least [REDACTED] (and potentially as high as [REDACTED]). *Id.* In other words, the first 5% increase above “standard” supposedly produces [REDACTED] in extra profit per unit, whereas the second 5% (increasing from 5% to 10% above “standard”) yields an additional [REDACTED] to [REDACTED] in profit (i.e., [REDACTED] and [REDACTED] minus [REDACTED]). That would mean Samsung gains one-and-a-half to three times the increase in profit for exactly the same incremental increase battery life (5%), based only on the arbitrary selection of “standard” battery life as a starting point. Dr. Groehn does not explain why he thinks consumers are willing to pay more for the second 5% increase for the very same phone than the first 5% increase, regardless of what battery life is considered to be “standard.” That disparity alone is suspect, but it becomes entirely irrational when one considers the impact of a subjective “standard” battery life, which warrants exclusion. *Oracle Am., Inc. v. Google Inc.*, No. C 10-03561 WHA, 2012 WL 850705, at *10-11 (N.D. Cal. Mar. 13, 2012); *Virnetx, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1329 (Fed. Cir. 2014). Thus, both Dr. Groehn’s conjoint survey and subsequent conjoint analysis, which depends on the survey, are unreliable and must be excluded.

C. Conjoint Analysis Is Inappropriate for Estimating Price

According to scientific articles cited by Dr. Groehn himself, conjoint (regression) analysis cannot reliably identify the “pricing” or “incremental profit” of an individual feature in the complex real-world market for smartphone devices. *See Daubert* at 593–94. In fact, Dr. Groehn admitted smartphone makers do not use conjoint analysis the way he proposes. Ex. B (Groehn 5/13/2024 Tr.) at 125:23–126:05 (“I believe economic value of battery life to the manufacturer is something specific to patent cases and would probably not be calculated in the normal course of

business.”). As Dr. Groehn’s own sources state unequivocally, “[i]t should be emphasized that conjoint analysis can only estimate demand. Conjoint survey data, alone, cannot be used to compute market equilibrium outcomes such as market prices. . . .” Ex. D (Allenby 2019) at -81 (emphasis added).³ Again, Dr. Groehn has failed to show “sufficiency” of the “application of the expert’s methodology,” a question that the Advisory Committee made clear goes to admissibility, not weight, in amending Rule 702.

Dr. Groehn has only studied consumer value in his conjoint analysis, yet his conclusions are in terms of real-world dollars for real-world phones. His analysis does not account for costs or competition—the key elements necessary to actually determine real-world market prices in this particularly complex, nuanced market for smartphones. Indeed, Dr. Groehn’s cited source again confirms that the calculations he performed in his regression do not account for market competition. Ex. D (Allenby 2019) at -89 (“A monetary conversion of the part-worth of a product feature, however, is not sufficient for measuring economic value because it does not consider the effects of competitors in the market.”) Dr. Groehn’s survey and subsequent analysis do not recreate the actual competition in the market because the survey does not account for different prices across different retailers of the same smartphones (Ex. B (Groehn 5/13/2024 Tr.) at 181:07–185:03 (admitting “we don’t need to get the prices exactly right...”)); testing less than all of the features that are known to motivate customer choice in the smartphone market including numerous

³ See *Visteon Glob. Techs., Inc. v. Garmin Int’l, Inc.*, No. 10-CV-10578, 2016 WL 5956325, at *7 (E.D. Mich. Oct. 14, 2016) (where the expert explained “[i]t is important to recognize that these values do not represent the actual amounts consumers would be willing [to] pay for the inclusion of the patented features in a competitive market. It would be incorrect to suggest that these four patented features alone are responsible for \$50.68 of the price of a GPS system. Price is primarily determined by three factors: consumer value, producer costs, and competition. I studied only one, consumer value.” Even with expert’s acknowledgement of this foundational limitation of conjoint analysis, the court still excluded conjoint analysis as unreliably applied to stand for price without proper adjustments.)

non-patented features (Ex. A (Groehn Rpt.) at Fig. 13 (citing Samsung internal study identifying at least [REDACTED] [REDACTED])); and improperly skewing the primary driver of market demand, brand (by combining brand with model, offering only one flagship model per brand), (Ex. A (Groehn Rpt.) at Fig. 12 (citing Samsung internal study stating [REDACTED] [REDACTED])). Regression calculations cannot correct market-divorced survey results such that they could even **estimate** actual market preferences. Ex. D (Allenby 2019) at - 81 (“Conjoint practitioners have chosen the unfortunate term ‘market simulation’ to describe demand predictions based on conjoint analyses. These practices are not simulations of any market outcome and must be understood for their limitations”); *see also id.* (“Even with existing products for which marketplace data *is* observed, there are many situations in which it is not possible to identify consumer preferences.” (emphasis added))).

Just as in *Visteon Global*, “it is undisputed, that Dr. [Groehn’s] study did not attempt to determine a real world price for the [] patented features, and did not endeavor to value any non-patented features or to determine the value of the [] patented features relative to the multitude of non-patented features in the accused devices,” therefore Dr. Groehn’s conjoint analysis cannot be admissible here because his results are applied in a manner inconsistent with accepted methodologies in the field of economics. *Visteon Glob.*, 2016 WL 5956325, at *6. The Federal Circuit “has consistently held that “a reasonable royalty analysis requires a court to ... carefully tie proof of damages to the claimed invention’s footprint in the market place,” which Dr. Groehn’s analysis does not do due to all the failures discussed above. *Virnetx*, 767 F.3d at 1327.

IV. CONCLUSION

For the foregoing reasons, Samsung respectfully requests the Court exclude Dr. Groehn's opinions, which are based on his conjoint survey and analysis.

Dated: October 25, 2024

Respectfully submitted,

By: /s/ Katherine H. Reardon

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CERTIFICATE OF CONFERENCE

The undersigned hereby certifies that counsel for Defendants have complied with the meet and confer requirement in Local Rule CV-7(h). This motion is opposed. The personal conference required by Local Rule CV-7(h) was conducted on October 23, 2024. The parties were unable to reach agreement as to Samsung's requested relief.

/s/ Sara C. Fish

Sara C. Fish

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing document was filed electronically in compliance with Local Rule CV-5 on October 25, 2024. As of this date, all counsel of record had consented to electronic service and are being served with a copy of this document through the Court's CM/ECF system under Local Rule CV-5(a)(3)(A).

/s/ Katherine H. Reardon

Katherine H. Reardon